

## CLAIMS

1. A network modem device connecting a Local Area Network (LAN) to a remote network, comprising:  
a local store containing a list of domain or host names and attribute data; and  
a Domain Name Service (DNS) relay module  
using said list and said attribute data to respond to requests for a numeric address in response to a domain name, when said domain name requested is on said list and  
generating a DNS request to an external DNS on said remote network and  
returning a reply from said external DNS to respond to said request for a numeric address when said domain name requested is not on said list.
2. A network modem device as claimed in claim 1, wherein said attribute data is an IP address.
3. A network modem device as claimed in claim 1, wherein said attribute data identifies a domain or host name as a local station on said LAN and said DNS relay module, when said domain or host name is identified as a local station on said LAN, replies locally to said request.
4. A network modem device as claimed in claim 1, wherein said Domain Name Server relay module is connected to a router and wherein said router is connected to at least one ISDN channel.
5. A network modem device as claimed in claim 4, wherein said router is connected to two ISDN channels: one for the intranet and one for the Internet.

6. A network modem device as claimed in claim 3, wherein said DNS delay module listens to NetBIOS Over IP packets of information, extracts local computer names and associated IP addresses from said packets, adds said computer names and associated IP addresses to said list of domain names.

7. A network modem device as claimed in claim 2, wherein said list is a list of domain names looked-up on the external DNS, and said DNS relay module automatically adds to said list of domain names looked-up on the external DNS, an entry corresponding to said reply from said external DNS.

8. The device according to claim 1, wherein said device is a digital network modem.

9. The device according to claim 8, wherein said device is an ISDN modem.

10. The device according to claim 1, wherein said list comprises :  
a list of domain names looked-up on an external DNS with corresponding attribute data; and  
a list of host names declared on said LAN with corresponding attribute data.

11. The device according to claim 1, wherein said external DNS is one of a group of external DNSs.

12. The device as claimed in claim 1, wherein said list of domain names and attribute data has an expiry date and time, and said DNS relay module comprises a mechanism for requesting from an external DNS a newly fetched numeric address for said domain name when a next request for said domain name will be received, for restoring said newly fetched numeric address as the

attribute data for said domain name in said list and for refreshing said expiry date and time.

13. A method for relaying DNS requests on a LAN comprising:  
analyzing requests for a numeric address in response to a domain name using a local store containing a list of domain or host names and attribute data;  
generating a DNS request to an external DNS on said remote network and returning a reply from said external DNS to respond to said request for a numeric address when said domain name requested is not on said list;  
replying to said request using said attribute data when said domain name requested is on said list.

14. A method as claimed in claim 13, wherein said attribute data identifies a domain name as a domain name for a device on said LAN.

15. A method as claimed in claim 13, wherein said replying involves not requesting a numeric address on said external DNS and responding to said request with a numeric address corresponding to said domain or host name.

16. A method as claimed in claim 13, wherein said attribute data is an IP address.

17. A method as claimed in claim 14, further comprising steps of listening to NetBIOS Over IP packets of information, extracting local computer names and IP addresses from said packets and adding said computer names and IP addresses to said list of domain names.

18. A method as claimed in claim 17, wherein said list of computer names declared on the LAN is automatically built using packets of information sent by

stations on said LAN using NetBIOS Over IP protocol in which said station name and IP address is available.

19. A method as claimed in claim 13, further comprising a step of automatically adding to said list of domain names looked-up on the external DNS, an entry corresponding to said reply from said external DNS and wherein said list is a list of domain names looked-up on the external DNS.

20. A method as claimed in claim 13, wherein said list comprises :  
a list of domain names looked-up on an external DNS with corresponding attribute data; and  
a list of host names declared on said LAN with corresponding attribute data.

21. A method as claimed in claim 13, wherein said external DNS is one of a group of external DNSs.

22. A method as claimed in claim 13, wherein said list of domain names and attribute data has an expiry date and time and said method further comprises the steps of  
requesting from an external DNS, a newly fetched numeric address for said domain name when a next request for said domain name will be received,  
restoring said newly fetched numeric address as the attribute data for said domain name in said list and  
refreshing said expiry date and time.